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**TAG-OUT USERS**

**MANUAL**



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**TAG-OUT USERS MANUAL****REFERENCES**

- (a) Code of Federal Regulations, 29 CFR 1915 Subpart F, Section 1915.89; Control of Hazardous Energy (Lock-out/Tags-Plus)
- (b) OPNAVINST 3120.32 - Standard Organization and Regulations of the U.S. Navy, Section 630.17, Equipment Tag-Out Bill
- (c) NAVSEA S9002-AK-CCM-010/6010 - Industrial Ship Safety Manual for Submarines
- (d) NAVSEA 0989-028-5000 - Manual for the Control of Testing and Plant Conditions
- (e) OPNAVINST 5100.19 - Navy Occupational Safety and Health (NAVOSH) Program Manual for Forces Afloat
- (f) NAVSEA S9213-41-MAN-000/(R) - Engineering Department Manual for Naval Nuclear Propulsion Plants
- (g) NAVSEA 0989-150-0000 - Standard Navy Nuclear Valves
- (h) NAVSEA S9086-KC-STM-010 - Naval Ships' Technical Manual, Chapter 300, Electric Plant General
- (i) COMFLTFORCOMINST 4790.3 - Joint Fleet Maintenance Manual
- (j) NAVSEA SS521-AG-PRO-010/0910-LP-708-8000 - U.S. Navy Diving Manual
- (k) NAVSEA 0348-159-1000 - Freeze Sealing Manual
- (l) MIL-STD-1625 - Safety Certification Program for Drydocking Facilities and Shipbuilding Ways for U.S. Navy Ships
- (m) NAVSEA 0989-018-1000 - Manual for the Control of Refueling

**1.1 PURPOSE.** The purpose of this manual is to:

- a. Provide for personnel and ship safety and prevent damage to equipment.
- b. Prevent improper operation when a component, equipment, system or portion of a system is isolated or in an abnormal condition.
- c. Prevent improper operation when a freeze seal is applied to a system or when other safety devices such as blank flanges are installed for testing, maintenance, or casualty isolation.
- d. Provide a procedure for use when an instrument is unreliable or not in its normal operating condition.
- e. Provide standard tag-out procedures.
- f. Provide a procedure for control of hazardous energy.

**1.1.1 Administrative Considerations**

- a. Appendix A contains the listing of acronyms used throughout this manual. Acronyms will be defined at their first appearance in the manual. Appendix B contains the glossary of terms used throughout this manual.
- b. Formal change requests to this manual may be submitted using the Technical Manual Deficiency/ Evaluation Report (TMDER) attached to the end of this manual. Change requests submitted either by mail, facsimile or E-mail must contain all of the information required on the TMDER and sufficient justification should be provided to support the change request.
- c. This manual is written for execution of tag-out using an electronic tag-out program. Appendix K provides guidance for using manual tag-outs in situations where the electronic tag-out program is not used.



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## 1.2 APPLICABILITY.

- a. The requirements of this manual apply to equipment tag-outs and instrument labels on all systems and components on naval ships and craft when manned by Ship's Force. Appendix F, paragraph 4.g, provides specific requirements to be followed when performing simple electrical troubleshooting and maintenance without a tag-out.
- b. For "smart" ships and submarines, electrical and mechanical isolation shall be accomplished in accordance with Appendix F. Procedures for placing components out of service in the "smart" system and restoring components to service are not considered to be an integral part of the tag-out process, but are required for computer alignment and visual indication. Appendix F requires that an "air gap" be used in the tag-out of "smart" components. When isolating a smart ship component/system ensure the component/system is isolated such that, the computer/touch screen no longer has an effect on that component/system. Ship specific procedures for securing, placing out of service/Out-of-Commission (OOC), tagging, and restoring "smart" components are contained in the ship's operating procedures (submarines) or Engineering Department Organization and Regulations Manual (surface ships).
- c. The requirements of this manual are intended for use with systems that are under the operational control of Ship's Force. For reactor plant system tag-outs by Repair Activities (RA), see Appendix C. For non-reactor plant systems and equipment prior to system turnover during new construction, hazardous energy control shall be per reference (a).
  - (1) Military Diving Commands shall utilize this manual when performing diving equipment maintenance. Applicable requirements of reference (a) shall also be met.
  - (2) Craft. At the Commanding Officer's (CO's) discretion, commands may choose to utilize a locally developed hazardous energy control program compliant with reference (a). This program may be in lieu of the requirements of this manual when performing maintenance on craft (e.g. barges, floating cranes, lighters, and small boats) where there are no Ship's Force or insufficient Ship's Force assigned to hang tags in accordance with this manual. When utilizing the requirements of this manual aboard craft for which there is not assigned Ship's Force personnel, commands shall ensure the additional regulatory requirements of reference (a) are met.
- d. This manual meets the requirements of and is based on references (b), (c), (d), and (e).
- e. This manual was developed with Fleet and RA inputs and contains technical requirements from OPNAV, NAVSEASYS COM and Fleet documents, for ship operations and maintenance. Fleet concurrence will be obtained for any subsequent changes to this manual.
- f. In case of conflicts with other manuals, address the conflict to NAVSEA, via appropriate chain of command, for resolution.
- g. When specific valve position verification procedures are provided in the applicable reactor plant manual, steam and electric plant manual, propulsion plant manual, or valve technical manual, those procedures take precedence over the general valve position verification procedures specified in this manual.

## 1.3 RESPONSIBILITIES.

### 1.3.1 Ship's Force

- a. The Commanding Officer/Officer in Charge is responsible for the safety of the entire command, and is required to ensure that all persons concerned know applicable safety precautions and procedures and to ensure compliance with this manual. Ship's Force



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Department Heads are responsible for ensuring that personnel assigned to their respective areas understand and comply with this manual.

- b. The Authorizing Officer (AO) shall supervise the tag-out log and will assist in obtaining Commanding Officer authorization of tag-outs when needed.
- c. Supervisory watchstanders shall review associated tag-out logs during watch relief and shift turnover.
- d. Ship's Force is responsible for ensuring the adequacy and accuracy of all tag-outs, including those proposed by the RA. They shall also verify that tags, which are no longer needed, are removed as soon as possible after the operation/work line item(s) has been cleared. Ship's Force is responsible for system restoration (e.g., valve/switch lineups) after tags are cleared.

1.3.2 Authorizing Officer. Each tag-out log is administered by an Authorizing Officer. The Authorizing Officer:

- a. Is responsible for the administration of their cognizant tag-out log.
- b. Is Ship's Force except for RA tag-outs per Appendix C.
- c. Is designated by the Department Head by billet or watchstation (for non-propulsion plant).
- d. Is the Watch/Duty Officer for the propulsion plant tag-out log(s).
- e. For submarines underway on the surface, the Officer of the Deck (OOD) may designate the officer or Petty Officer in Charge (POIC) of the control room as the Authorizing Officer. During this time no tag will be issued or cleared without the verbal concurrence of the OOD. The officer or POIC of the control room, when designated the Authorizing Officer, will ensure compliance with the provisions of this manual. In this case, the OOD, upon relief, will review the line item(s) initiated or cleared during his watch. Any discrepancies shall be immediately resolved.
- f. The Ship's Commanding Officer may authorize, in writing, a qualified watch officer, designated as the Assistant Authorizing Officer (AAO), to be responsible for confirming the adequacy and accuracy of a line item. Two examples of when assignment of an Assistant Authorizing Officer might be beneficial are during periods of heavy maintenance, to unburden the on-watch duty officer, and when the cognizant division officer is acting in this capacity to review tag-outs for work on systems under his/her cognizance.
  - (1) These individuals shall be designated for only those tag-out logs they are qualified to supervise.
  - (2) The Assistant Authorizing Officer shall sign in the **Accuracy/Adequacy Check** block for the line item signifying the adequacy and accuracy of the tag-out.
  - (3) The Authorizing Officer shall sign the **Authorizing Officer Issued** block of the line item signifying agreement that any associated system status changes and installation of tags are compatible with ship and plant conditions.
  - (4) The Assistant Authorizing Officer may also sign as Authorizing Officer on the tags after the Authorizing Officer has authorized the line item. The Authorizing Officer must be informed prior to changes to system status.
  - (5) The Assistant Authorizing Officer can process line items to authorize work using previously hung tags and can sign as Authorizing Officer on the line item. Similarly, the Assistant Authorizing Officer can sign the **Work Center Supervisor (WCS) or POIC (Work Complete)** block to clear line items within a tag-out (for Completed work) that would not result in the clearing of any tags.

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### 1.3.3 Repair Activity

a. The RA is responsible for:

- (1) Ensuring personnel understand and comply with this manual including their sub-contractors.
- (2) Reviewing tag-outs associated with RA work.
- (3) Ensuring the accuracy and adequacy of tag-outs before signing the **Repair Activity Rep** block of the line item. This review shall ensure that enough tags are used to completely isolate the system, piping, or circuit being worked on or to prevent operation of a system or component from all stations that could exercise control. Approved system diagrams or circuit schematics shall be used to determine the adequacy of all tag-out actions. When local instructions allow, the documented verification signature made by a qualified repair activity individual proposing the tag-out may be used as the repair activity's validation of the adequacy and accuracy of a tag-out. This allowance only applies when the proposed tag-out and the authorized tag-out are identical. The RA Representative authorizing the line item remains responsible for ensuring the tag-out is compatible with system status and ship/plant conditions.
- (4) Ensuring tags that are no longer needed, are authorized for removal as soon as possible after the operation/work line item has been signed as completed.
- (5) Ensuring qualified personnel act as the RA Representative for tag-out procedures.

b. The RA:

- (1) Acts as the Authorizing Officer for RA tag-outs (see Appendix C).
- (2) Signs line items associated with RA work.
- (3) Witnesses or verifies checking of posted tags, signs tags and initials in the **Repair Activity Witness** block on the Tags to be Hung Sheet (THS) or Line Item Record Sheet (LIRS), if the LIRS is being used to capture RA Witness initials.

c. Exceptions:

- (1) Contractors who are not qualified in accordance with paragraph 1.4.2 of this manual shall perform their duties as RA in the following manner:
  - (a) Signature in the **Repair Activity Rep** block of the line item is based on a direct report or briefing they receive from Ship's Force. The contractor's signature represents confirmation by the contractor that based on this briefing, the contractor understands the hazards presented by the ship's systems on which the contractor will be working, including receiving assurance that appropriate isolations have been performed.
  - (b) Signature in the **Repair Activity Witness** block of the Danger Tag and corresponding initials in the **Repair Activity Witness** block of the THS/LIRS, are based on the contractor having been shown the installed tag and the means to ensure the component is in the position/condition specified on the tag, and the **Tagged Position/Condition** block of the THS per paragraph 1.6.5.a of this manual.
  - (c) Signature in the **Repair Activity Witness** block of the Caution Tag and corresponding initials in the **Repair Activity Witness** block of the THS/LIRS are based upon the contractor being shown the installed tag and the amplifying instructions on the tag.
  - (d) Signature and date in the **Repair Activity Rep (Work Complete)** block of the line item is based upon the contractor's knowledge that the work item/operation is complete.



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- (e) When requested by the Authorizing Officer, the contractor signs the **Clearance Authorized – Repair Activity** block of the Tags to be Removed Sheet (TRS) to indicate that the contractor portion of the work/operation is complete and the tags are no longer needed for the contractor's work.
  - (f) As an alternative, the contractor may specifically agree via their contract or Memorandum of Agreement (MOA) that all RA responsibilities as defined in this manual are assigned to the lead RA. In all cases, appropriate information shall be provided to the contractor prior to initiating work to ensure that the contractor understands the hazards involved and does not remove existing tags or take any action that changes the position of tagged components.
- (2) Naval activities who are required to follow this tag-out manual, such as ships, Naval Intermediate-Level fleet maintenance activities (e.g., Fleet Maintenance Activities (FMA)) and naval shipyards, will normally not be permitted to assign their tag-out review and signature responsibilities to another activity since Naval activities have sufficient knowledge to perform a proper review. The only exception is if a shipyard or FMA is performing work where another shipyard is the lead RA. In this case, the MOA between these activities may assign the lead shipyard the tag-out responsibilities. However, provisions should be included for the lead shipyard to work with the shipyard or FMA performing the work to ensure the tag-out adequacy and accuracy.

#### 1.4 TRAINING AND QUALIFICATIONS.

- 1.4.1 All individuals who perform work aboard Naval Vessels shall be indoctrinated in basic purpose, use and restrictions associated with this manual. Additionally, personnel indoctrination and training shall include that the RA employee will be provided the opportunity to review isolations and system conditions established for their work.
- 1.4.2 Personnel assigned to prepare tag-outs, review tag-outs, position equipment, post (attach) tags, check posted tags, clear (remove) tags, or perform tag audits, shall be qualified on this tag-out manual. Formal notices which list qualified personnel by name are not required by this manual. The Authorizing Officer is responsible for ensuring that Ship's Force personnel assigned to make a tag-out are qualified to perform the duties under this manual.
- a. Tag-out User's Manual training topics shall be included in the Ship's, and RA, continuing training program.
  - b. The term qualified as used in this Tag-out User's Manual means that the person assigned to perform a tag-out function is knowledgeable about the requirements of this manual and is knowledgeable about the involved system/equipment.
  - c. Ship's Force qualification in this Tag-out User's Manual should be done by the completion of 3M 301 Personnel Qualification Standard, and if required, completion of departmental qualifications.
  - d. RA personnel are qualified in this Tag-out User's Manual by successful completion of the activity's training program. A formal system should be in place at the RA for performing and tracking qualifications of personnel on this manual.

#### 1.5 PLANNING TAG-OUTS.

##### 1.5.1 Tag-out Logs and Records

- a. The number of tag-out logs maintained by a ship will depend on ship size and needs. Individual Type Commanders shall specify the number of logs maintained for various ship classes, and where the logs will be maintained.



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- b. The number of tag-outs shall be kept to a minimum. Most line items can be prepared under a single tag-out (this includes both nuclear and non-nuclear work items). For the ease of administering tag-outs in multi-plant ships, a separate tag-out may be prepared for each plant or department.
- c. On nuclear-powered ships, a separate tag-out log for each propulsion plant shall be maintained in addition to other ship's tag-out logs. This log:
  - (1) Is administered by the Watch/Duty Officer.
  - (2) Is used for propulsion plant systems and equipment, and for other systems and equipment in the engineering spaces under the cognizance of propulsion plant divisions.
  - (3) Is maintained in the Maneuvering Area, or Enclosed Operating Station, as applicable.
- d. The electronic tag-out program maintains an index of line items.
- e. The binder for storing records produced from the electronic tag-out program shall be maintained in the vicinity of the computer terminal used by the Authorizing Officer. The binder shall be marked appropriately. The binder shall be maintained in the following format:
  - Part 1 - A copy of the Tag-out User's Manual.
  - Part 2 - Active LIRS (if not utilizing electronic signatures). Include draft LIRS if documenting CO's concurrence per paragraph 1.6.2.c or documenting additional RA Witness for shared tags.
  - Part 3 - Active Tags to be Hung Sheets.
  - Part 4 - Cleared LIRS (if not utilizing electronic signatures)/Cleared Tags to be Hung Sheets/Completed Tags to be Removed Sheets.
  - Part 5 - Instrument Log sheet(s) (see Appendix D, Figure 9)
  - Part 6 - Record of audits.
- f. Tag-out serial numbers shall normally consist of a department/division designator (multi-plant ships may include a numeric designation for each tag-out within a department) followed by a "hyphen" and then a sequential number (e.g., ENG-DANGER-0001). To differentiate between tag-out logs, a prefix system approved by the Commanding Officer shall be used with the log serial number. For example, on nuclear submarines, in order to differentiate between ship's tags and propulsion plant tags, ship's tags shall be prefixed S and propulsion plant tags P. Another example of tag-out prefixes is P1 for a propulsion plant tag-out in the first plant of a multi-plant ship.
- g. Hanging line items that have been modified due to changing work boundaries or other administrative reasons shall have the same serial number as the original line item followed by a series/repeat number in parentheses beginning with "(1)". This will indicate to users that a revision has been made to existing line items. An example of this would be EE01-1234[PMS](1) or if a description and/or date are used, EE01-1234[PMS] Megger Check #2 R-114 Motor 02 Jan 02(1). Other variations such as alphabetic (i.e., a, b, c, etc.) will only be recognized by the "eTAG-OUT" tag-out program but will not be recognized by "ESOMS" tag-out program. Numbers shall be used to provide consistency between Fleet/RA and be placed at the end of the line item nomenclature.
- h. The line item index shall be used as the official index record. There is no need to maintain a paper index in the tag-out log binder. For auditing purposes, the line item index may be printed to allow for remote auditing, but this index need not be maintained with the log binder.



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- i. Figures of Appendix D and Appendix K are illustrations of NAVSEA forms and/or formats. Appendix D, Figures 10 and 11 provide a template for standardization of an audit record sheet. Forms produced by NAVSEA 04X approved automated tag-out systems are acceptable substitutes for all forms (except tags) required by this manual. Tags should normally be limited to the standard tags in Appendix D and Appendix K. Minor changes made by NAVSEA 04XQ (e.g., change in material used or layout) to the tags depicted in Appendix D and K are acceptable as long as there is no change in content.

#### 1.5.2 Use of Line Items and Tags

##### a. Use line items:

- (1) For work or casualty isolation.
- (2) For indicating the presence of safety devices required for safety of personnel or equipment not consistent with normal operations, except as excluded in Appendix F, paragraph 3(f).
- (3) For controlling status of equipment or components placed Out-of-Commission /Service.
- (4) To indicate the presence of electrical jumpers unless specifically controlled by other formal methods such as troubleshooting records, wire removal forms, or written procedures.
- (5) When required by operating procedures.

##### b. When line items are used:

- (1) Use enough tags to prevent injury to personnel and damage to equipment by completely isolating the work area.
- (2) The use of tags is not a substitute for other safety measures such as chaining or locking valves, removing fuses, or racking out circuit breakers. However, tags shall be attached to the fuse panel, racked out circuit breaker cabinet, or locked valve to indicate such action.
- (3) Minimize the number of tags used through careful work planning in an effort to maintain better control of the tag-out process.
- (4) A work item Work Authorization Form (WAF) may be supported by more than one line item when different parties are cognizant of the items being tagged.
  - (a) When only one electronic tag-out database is being used, multiple line items may be used on a single WAF (e.g., tags in plant #1 may be needed to isolate work in plant #2 or when both nuclear and non-nuclear components are tagged for work using separate line items). These line items are both represented, and visible, to each other in the database and database reports will see all the components in both line items.
  - (b) Ships that have more than one electronic tag-out databases, (e.g. CVNs have one for Propulsion Plant and a separate one for non-propulsion plant) may require isolation of components from both databases, and therefore multiple line items, for a single WAF. Since the components of these line items are not represented, or visible, in both databases, careful consideration and coordination is required to ensure all line items remain in a hanging status until Block 16 on the WAF (Work Complete) is signed. The WAF is the only document linking the multiple line items since there is no visibility between the electronic databases.

- c. Use danger tags to prohibit the operation or removal of equipment that could jeopardize safety of personnel or endanger equipment, systems or components.



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- d. Use caution tags to provide temporary special instruction(s) or to indicate that unusual actions must be exercised to operate equipment. Caution tags must state the specific reason the tags are installed. Use of a phrase such as "DO NOT OPERATE WITHOUT EOOW PERMISSION" is not appropriate since equipment or systems are normally not operated unless permission from the responsible supervisor has been obtained. A caution tag is not used if personnel or equipment can be endangered while performing evolutions using normal operating procedures. A danger tag is used in this case.
- e. Any person having knowledge of a situation requiring tags or labels should request that they be issued and applied.
- f. Tags should:
  - (1) Be removed as soon as possible after all line item(s) listing a component are cleared. Only tags not shared with other line items and listed on the Tags to be Removed Sheet (TRS), may be removed.
  - (2) Never be used for component identification, or to mark leaks.
  - (3) Not be reused.
- g. Tags of color, size, and shape similar to danger or caution tags will not be used for any other purpose onboard ships or craft.

#### 1.6 ESTABLISHING TAG-OUTS.

- a. Use enough tags to completely isolate the system, piping, or circuit, being worked on and to prevent operation of a system or component from all stations that could exercise control. As a minimum, system diagrams or circuit schematics shall be used, by preparers and reviewers, to determine the adequacy of all tag-out actions. The system/component identification (for example, 1MS-V1, HYDRAULIC PUMP BKR @ 1S-4P-F(1)) and position/condition (for example, OPEN, SHUT, BLANK FLANGE INSTALLED) of the tagged item should be indicated by the most easily identifiable means. As a minimum, the **System Component ID/\*Location** block of the Tags to be Hung Sheet (THS) and System/Component ID block on the tag must include the actual label-plate component identifier (e.g., valve number or circuit designation). If slight differences between the identifiers are noted, (e.g., 64-4P-K(1) LO PMP #3 on the tag when label-plate identifier reads 64-4P K(1) L.O. PUMP No. 3, etc.) it is not necessary to re-create and hang a new tag provided that there is no doubt that the correct component has been tagged. If doubt exists due to an incorrect or inadequate unique component identifier (e.g. Sample Cooler Chill Water Supply), contact the Authorizing Officer for resolution. Appendix I provides the administrative procedures for naming components when creating, updating and maintaining the electronic tag-out program. Appendix F paragraph 5.b provides direction for temporary component ID tags until a permanent label plate is installed. **Never hang a danger tag on a component without a proper label as described above.**

**NOTE: APPENDICES F AND G SHALL ALSO BE CONSIDERED IN DETERMINING THE ADEQUACY OF THE TAG-OUT.**

- b. Line items prepared for diver's operations shall follow the guidance of Appendix E.

- 1.6.1 Creating a Line Item. Evaluate if the danger tagged component is located in a high traffic area. If yes, take action per Appendix F, paragraph 3.b(2). Any qualified Ship's Force person may prepare line items. Normally the preparer is the Ship's Force POIC of the operation/work item. During shipyard Chief of Naval Operations (CNO) availabilities, the shipyard will normally propose the tag-out to Ship's Force (but not necessarily prepare the line items) for shipyard work. The following provides requirements for creating and updating line items. Existing databases that use a consistent line item numbering convention are not required to be changed to meet these requirements. If the

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**APPENDIX B**  
**GLOSSARY OF TERMS**

<b><u>TERM</u></b>	<b><u>DEFINITION</u></b>
Assistant Authorizing Officer	The individual designated in writing by the ship's Commanding Officer to assist the Authorizing Officer by confirming the adequacy and accuracy of a tag-out.
Authorizing Officer	The person with the authority to sign for issuing or clearing tags and labels. Department Heads shall designate Authorizing Officers by billet or watchstation.
Caution Tag	A yellow tag used as a precautionary measure to provide temporary special instruction or to indicate that unusual action must be exercised to operate equipment.
Certified Line Item/Certified Tag-out	A line item/tag-out that has been prepared and approved in advance for situations of routine evolutions or where time is critical (e.g. casualty response) as directed/approved by the Commanding Officer.
Cleared	<p>This is an Authorizing Officer function. When the line item is "cleared", the hanging tags are no longer referenced by that line item. The Assistant Authorizing Officer can clear line items within a tag-out (for Completed work) that would not result in the clearing of any tags.</p> <p>For ESOMS, if the tags are not referenced by any other line item, the electronic tag-out program will status the tags no longer required as cleared and print a Tags to be Removed Sheet (TRS) to inform the Authorizing Officer to direct removal of the hanging tags.</p> <p>For eTAG-OUT, the tags are statused as <b>Clearance Authorized</b> and do not become "cleared" until the AO enters the tags have been physically removed.</p>
Component	A valve, switch, etc.
Component Contractor	A commercial ship maintenance provider contracted directly by the Government to accomplish work on an individual component, or limited number of like components.
Cross Check	The selection of this attribute (yes) will activate two additional signature requirements on the line item verification sheet. These additional signatures must be entered prior to the Authorizing Officer issuing the line item. This feature may be used when a line item created by one department/division affects another department/division's components.



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Danger Tag	A red tag prohibiting operation or removal of equipment that could jeopardize safety of personnel or endanger equipment, systems, or components.
Draft Line Item	Tag-out line item generated with "DRAFT" appearing in the STATUS column for each component listed on the line item. This DRAFT status will remain until the line item is issued by the Authorizing Officer, after which, when printed, the "DRAFT" will no longer appear. Used to document Commanding Officer concurrence (if required).
Electrical Jumper	A temporary wire used to modify a circuit, such as by completing or bypassing the circuit.
Hanging	This is an Authorizing Officer function. When a line item status is "hanging", the Authorizing Officer has verified by receipt of the Tags to be Hung Sheet (THS) and LIRS (if shared tags are required to be used for RA Representative signatures, RA Witness Initials, or there is more than one RA) with Posted By, Posting Checked By and RA Witness initialed (if required), that tags are hanging on all components referenced on that line item.
Index Sheet (Danger/Caution Tag-Out Index and	A sequential list of all tag-outs issued using the manual process of Appendix K. It provides a ready reference of existing tag-outs, ensures sequential issuing of tag-out serial numbers, and assists auditing of the tag-out log.
Instrument Log	The control document for administering labels (OOC and CAL). It provides sequential listing of all OOC and CAL instruments.
Issued	Authorizing Officer function. When a tag-out line item is "issued", tag numbers are assigned to the components referenced on the line item. Some tags may have been issued by a previous line item and will be shared by the newly issued line item. For any tags that are not shared with a previous line item, the Authorizing Officer will print the THS and tag labels and issue the new tag(s) to personnel for hanging (if applicable).
Lead Maintenance Activity (LMA)	The single activity responsible for integrating all maintenance and modernization on U.S. Naval ships during any type of availability.
Line Item	An individual entry in a tag-out that details the isolation, hazards, and work required for completion of a specific job.

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Line Item Record Sheet (LIRS)	Provides necessary information required for isolating equipment for work including a list of required tags and verifying signatures. This sheet is similar to the front of the Tag-out Record Sheet (TORS) used in the manual tag-out system. This record sheet need not be printed if the ship is utilizing electronic signatures, but printed sheets may be maintained as a back-up to the electronic version and/or for documenting CO concurrence or RA Witness check of shared tags are required to be used for RA Representative signatures, RA Witness Initials, or there is more than one RA.
Master Tag-out	As used in Appendix J, the master tag-out is a concept used to provide for the isolation of multiple work items within a common boundary of a Master WAF.
Maximum Anticipated Waterline	As used in Appendix G, Barrier Criteria, the maximum calculated draft during the period of the maintenance action(s) that requires the barrier(s) for protection. The calculation is based upon the worst-case cumulative effect at any one time of all expected weight changes during the period of the maintenance action(s). (Submarines will use the condition "N" diving trim water plane unless the maximum calculated draft during the period of the maintenance action(s) is greater.)
Naval Supervisory Authority or Supervisory Authority (NSA)	The officer designated to represent the Navy Department at an industrial activity; normally a Supervisor of Shipbuilding (new construction), Regional Maintenance Center (Conversion and Repair), or the Commander of a Naval Shipyard.
Out-of-Calibration Labels	An orange label used to identify instruments that are out of calibration and will not accurately indicate parameters.
Out-of-Commission Labels	A red label used to identify instruments that will not correctly indicate parameters because they are defective, or isolated from the system. This label indicates that the instrument cannot be relied on and must be repaired and re-calibrated, or reconnected to the system, before use.
Repair Activity	A RA is any activity other than Ship's Force involved in the construction, testing, repair, overhaul, refueling, or maintenance of the ship.
Repair Activity Representative	The individual authorized to concur in the accuracy and adequacy of proposed tag-outs.
Repair Activity Witness	A qualified individual authorized by the RA Representative to witness proper tagging of components.
Safety Devices/Measures	Items installed for the purpose of protecting personnel or equipment. Some example of safety devices/measures are chaining or locking valves, removing fuses, racking out circuit breakers, freeze seals, blank flanges, mast clamps, securing devices/pins for Hatches (not in their normal operational condition) and breaker clips.